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ABSTRACT

Presented is an eight-week environmental education unit for third- and fourth-grade students. Three major concepts are developed: Independence, survival adaptation, and recyclement. Each concept is used to construct a section of activities that contribute to the student's development of that concept. A large appendix section lists many additional activities that may be used in this unit along with many different types of data-collection sheets for field experiences. A related document is ED 081 599. (JP)

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U.S. DEPARTMENT OF HEALTH
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ED 064498

ENVIRONMENTAL EDUCATION

INTERMEDIATE DIVISION

BOALSBURG SCHOOL

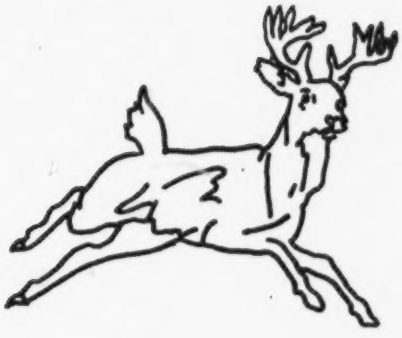
SE016 933

ED 086498

ENVIRONMENTAL EDUCATION

INTERMEDIATE DIVISION

BOALSBURG SCHOOL



The following unit is being presented to you as a sample environmental education unit that was developed by a team of teachers from the Boalsburg Elementary School with the help of Mr. Thomas Willson, a member of the environmental education program's staff. You should feel free to use any of the material presented in this unit. As stressed before, this is a sample, you may want to use part of it or none of it. If you would like help in developing a similar unit for your own use or help in developing a totally different type of environmental education unit, please contact Mr. Gary Owen at 237-6201. If Mr. Owen is not available when you call, leave your name with the Central Office secretary and he will return your call.

ENVIRONMENTAL EDUCATION

INTERMEDIATE DIVISION

BOALSBURG SCHOOL

This unit was developed for use during the final eight weeks of the 1971-72 school year by Mrs. Rosemary Bluman, Mrs. Mary Kisner, Mrs. Anne Nastase, and Mrs. Irene Mong with assistance from Tom Willson and Mrs. Mildred Sweet.

The activities listed are an accumulation of those carried out by the various groups, some of which were used by all groups and others by only one or two groups.

As the unit developed, it was found that the interdependence portion consumed the bulk of the time allowed and therefore the other sections of the conceptual framework had to be dealt with in a less thorough manner. If this unit were to be used over a longer period of time, many more possible activities could be used for the survival and recyclement sections. The unit also lends itself to a major project in community betterment if time permits.

ORGANIZATION OF THE ENVIRONMENTAL EDUCATION UNIT

INTERMEDIATE DIVISION, BOALSBURG SCHOOL, 1972

The division consists of approzimately 120 children in two third grade and two fourth grade classes. During the afternoon these children worked in four language arts sections based upon their level of achievement in the language arts. During this unit language arts classes utilized the book strategy from the Outdoor Education-Stone Valley Unit Number 071-0003.

Related activity groups were selected in two sections, each consisting of one third and one fourth grade class. The sections divided into two "clubs" of mixed third and fourth graders. By organizing in this way, blocks of time for activities could be arranged between two teachers, working around two special teachers' schedules rather than four.

Each club selected a name and subdivided into units of five for small group activities. Field trips were taken as club groups.

Parents and 391 students provided extra leadership when needed.

RESOURCE PEOPLE

Mr. McGargle, Pleasant Gap Fish Hatchery 359-2754

Mr. Landiak, arrangements for tour of wastewater disposal plant 865-4731

Dr. Kardoz, Land and Water Research 865-8355

Mr. Ralph Schmidt, District Forester, Huntingdon, Pa.

SOURCES OF CONCEPTS AND ACTIVITIES

1. Environmental Education Instructional Activities K-6
   reprinted by the Pennsylvania Department of Education 1971
2. Outdoor Education, Smith, Carlson, Donaldson, Masters
3. Teaching in the Outdoors, Hammerman & Hammerman
4. Curriculum Enrichment Outdoors, Hug and Wilson
5. Teachers' Curriculum Guide to Conservation Education, Grades 1-3
   Brennan
6. Teachers' Curriculum Guide to Conservation Education, Grades 4-6
7. Pennsylvania Teaching Guide to Natural Resources Conservation
   DPI
8. Audobon Aids: Ecology, plants, trees, mammals, and birds.
9. Examining your Environment, Wentworth, Couchman, MacBean, Stecher
   a. Pollution
   b. Birds
   c. Snow and Ice
   d. Mini-climates
   e. Running Water
10. Creative Nature Crafts, Bale
11. Pollution: A Handbook for Teachers, Needham

CONCEPTUAL FRAMEWORK

I. INTERDEPENDENCE: Living things are interdependent with one another and with their environment.

A. Living things depend upon the non-living part of the environment.

1. Green plants get matter from the environment for growth.

2. Water is made available to living things through a cycle of evaporation and condensation.

3. Sunlight is essential to the growth of green plants.

4. Carbon dioxide and oxygen are used in both plant and animal metabolism.

B. All living things ultimately depend upon plants for food.

C. Plants and animals are dependent upon one another.

1. Environment determines the kind of plants which live in a community.

2. Environment determines the kind of animals which live in a community.

II. SURVIVAL: Living things survive through adaptation to the environment.

A. Those members of a species which have characteristics enabling them to adapt survive to reproduce and thus bring about changes in the species.

B. Failure to adapt results in extinction of a species.

C. Man affects the environment.

1. Man alters the environment to meet his needs.

2. Man pollutes the environment through ignorance, carelessness, and waste.

3. The increasing population's demands upon the environment have sometimes resulted in scarcity.

a. Some resources are renewable while others are non-renewable.

III. RECYCLEMENT

A. In nature, there is a continuous recycling of many elements.

B. Man would do well to observe nature's example and recycle the results of his technology.

IV. WHAT CAN WE DO NOW?

ACTIVITIES

I. INTERDEPENDENCE: Living things are interdependent with one another and with their environment.

A. How soil is made: Scrape two rocks together to show how soil is derived. Then discuss how plants and animals add humus.

B. Soil Survey: Choose six different areas of the school ground; each unit of five children should secure a sample from a different area. About 1/2 cup soil can be collected in a small jar to be brought to a designated site and labeled.

1. Students examine the soil samples carefully. Compare colors, textures, density. Smell. Use magnifying glass to look for root fibers, particles of quartz, etc.

2. Chart the results of this preliminary exam.

Obtain core samples from the same six areas. Carefully place the profile on the fold of a piece of oaktag which has been prepared with Elmer's glue. Label each profile.

Test porosity of each area and record on chart as above. Pour 1 liter of water into a juice can from which both ends have been removed so that it can be tamped firmly into the ground. Using a watch with a second hand, time how long it takes the soil to absorb the water completely.

Check and record the soil temperature at each area and record results.

Discuss differences and reasons for them.

*Homeroom math activities may be built upon the data obtained - differences, averages.

C. Poor soil vs. rich soil: (See Experiment #1 Page I appendix) Plant seeds in sand and potting soil. Water each the same and compare results.

D. Effects of sunlight, water, and fertilizer on green plants: Plant 8 - 12 seedlings in peat cups of sand. Label plants and decide upon a variety of controlled conditions of light, fertilizer, and water. Observe and record results. (See Page 2 appendix)

E. Place two very similar coleus cuttings in distilled water, one sample of which has been filtered through soil. (A nylon stocking makes a good filter.) Observe. OR grow seeds hydroponically without soil.

F. Soil Erosion: Fill a cake pan with soil and tilt to a 45° angle to represent hillside. Sprinkle with water to imitate rain, noting amount of soil washed away. Plant with grass seed. When well-sprouted, repeat sprinkling, noting difference in erosion. (See Experiment #2. Page III appendix)

G. Discuss soil erosion, its causes and prevention.

H. The earthworm and soil improvement: Fill two jars with alternating layers of dark soil and sand. Place several earthworms in one of the jars and label. Cover both of the jars with black paper. After several days, remove paper and observe.

I. Water Cycle: Use terrarium or place a large jar over a potted plant to demonstrate evaporation and condensation. Use transparency or large diagram to expand concept to earth's water cycle.

J. Soil structure: Chart layers of soil and discuss properties of each.

K. Web of Life: List foods eaten recently and trace to natural origin. Discuss Darwin's statement - "The amount of beef produced in a season depends on the number of cats in the neighborhood of the clover fields." Cats eat field mice which eat bumblebees which pollinate clover; thus plenty of clover seed, a large clover crop to fatten cattle. Establish dependence of life upon green plants.

L. Trip to Meyer's Woods: (or area of choice) Plot Study: In groups of five or six children, mark off a square meter with string. List by name or description as many things as they can find within the plot. Discuss findings, noting those things which are likely to occur in that area and those things less likely.

M. Repeat the above procedure using sites for comparison, a field or playground area and a stream. Note difference in plants and animals found in different communities. Discuss other kinds of communities.

N. Individual study project: Have each child choose one living thing to observe and identify. At the change of seasons, this observation may cover a period of weeks to illustrate seasonal transition.

O. Microscopic and near-microscopic life: Study a sample of pond water using the bioscope. Discuss the role of these minute forms of life in the food web.

P. Area survey: Group observation of several areas for
   1. ground cover
   2. size of trees
   3. variety of trees
   4. homes for wildlife
   5. small plants such as mosses
   6. fungi

Q. Parts and kinds of plants:
   1. Discuss and diagram O_2 , CO_2 cycle.
   2. Discuss photosynthesis.
      a. Filmstrip
      b. ditto: ("How a Leaf Makes Food." Page IV appendix)
   3. Examine a "leaf print" using the bioscope. Paint the under side of a leaf area about one inch square with clear nail polish. Use tweezers to carefully remove the film of polish when it is dry. Place film on a slide and examine with microscope or bioscope.
   4. Ditto: ("Kinds of Plants" Page V appendix)
   5. Tree identification, using a key. (Page VI appendix)
   6. Label and discuss purposes and parts of plant.

R. Mount Nittany Hike: All day trip, taking sack lunches; five or six adults accompanied each group of 30 children. Emphasis upon observation, using previously developed skills.
   1. Variety of plant life and variation at different points on the mountain.
   2. Difference in predominate rock found at various elevations; explain geological structure.
   3. Animals or signs.
   4. Stream, its source and disappearance into a sink hole.

S. Construction of several types of communities in murals or dioramas.

T. Estimation of tree height using Merritt hypsometer. (Page VII appendix)

U. Effect upon communities when one member is removed: discussion, referring to previously constructed food webs.

II. SURVIVAL: Living things survive through adaptation to the environment. 11

A. Discuss ways in which animals have adapted to their environment.

B. Individual or small group reports on adaptation of specific animals.

C. Ditto- "Animal Adaptation" (Page VIII appendix)

D. Ditto- "Life Cycle" (Page IX appendix)

E. Discuss species which are extinct and species which are currently threatened and the causes involved.

F. Discuss man's effect upon the environment, good as well as bad.

G. Protection and replenishment of fish to meet demands of population: field trip to Pleasant Gap Fish Hatchery and outdoor portion of Benner Spring Research Station.

H. Discuss resources which are renewable (such as forests) and those which are non-renewable (such as fossil fuels).

III. RECYCLEMENT:

A. Discuss how plants and animals are part of a continuous cycle in nature, pointing out ways in which man has used the process and ways in which he has interfered. (Pages X & XI appendix)

B. Discuss possibilities for recycling man's waste.
   1. Field trip to wastewater disposal plant on University Drive.
   2. Field trip to Land and Water Research Plots at PSU which use effluent from wastewater disposal plant to irrigate forest and field.
   3. Simplified diagram of wastewater plant used along with more technical one provided at plant. (Page XII appendix)

IV. WHAT CAN WE DO NOW?

A. Discussions throughout the units as appropriate.

B. List of contacts through which items may be recycled reproduced and distributed. (Page XIII appendix)

C. Culmination day at Allan Seeger Natural Area giving opportunity to appreciate natural area and man's responsibility to his environment. (Pages XVII - XVIII appendix)

"APPENDIX"

ATHLETE'S FOOT FROM HIKING CLUB

OUTDOOR ED

EXPERIMENT #1

At one time the earth was a motten or liquid mass. As different layers cooled and hardened, different minerals and kinds of rock settled over the earth's surface.

Most soil, however, has these layers:

TOPSOIL
SUBSOIL
CLAY
PARENT MATERIAL
BEDROCK

Rock can be broken into smaller bits. Sandstone is easily broken. Sand is commonly found in many areas because of this.

EXPERIMENT =

HELP GIVE BIRTH

TO A TREE!

Planting Norway Spruce

YOU WILL NEED:

a) A clean milk carton
b) A 6" square of aluminum foil
c) A baggie
d) A growing block. This block has been prepared with a mixture of fertilizers and other material to help a seed germinate.
e) 3 spruce seeds

DIRECTIONS

a. Soak your growing block for about 1/2 hour.
b. Put the block in a clean milk carton.
c. Drop 3 seeds in the hole of the block.
   Don't block the hole.
d. Add this much water to the bottom of the carton.
e. Put a baggie over the milk carton. Stretch it.
f. Punch about 8 or 10 holes in the baggie with a pencil.
   Spread them out evenly.
g. Place the Norway spruce in a sunny place.
h. Keep the water level even and watch for exciting growth!

ATHLETE'S FOOT FROM HIKING CLUB

OUTDOOR ED

EXPERIMENT #2 --- EROSION OF SOIL

EROSION IS THE _____.

EROSION IS CAUSED BY _____.

EXPERIMENT:

1. Cover the bottom of a pan with soil.
2. Tilt the pan at an angle to simulate a hill.
3. Sprinkle water (like rain) on the tilted pan of soil.

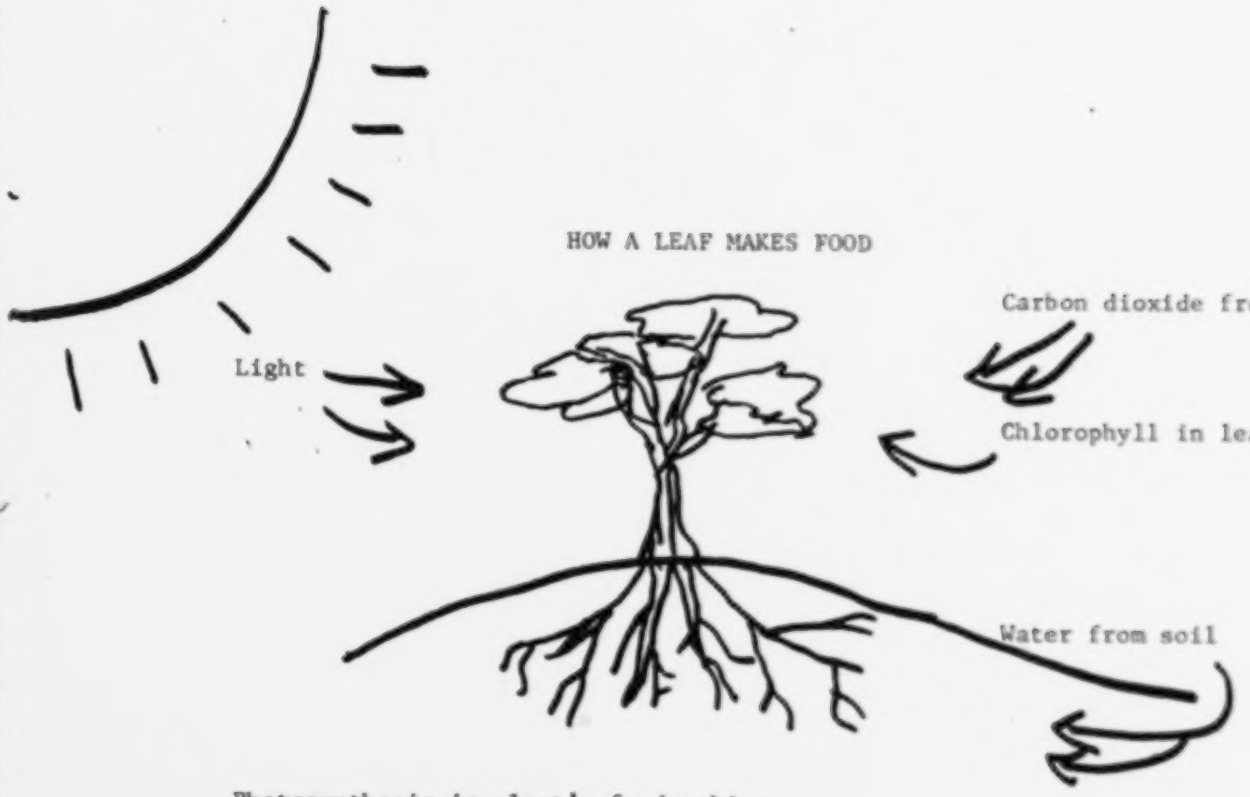
Watch what happens to it.

My observations:

4. Plant grass seed in the pan of soil. Repeat the experiment when the grass starts to grow. My observations:

5. Some things we can do to prevent erosion are:

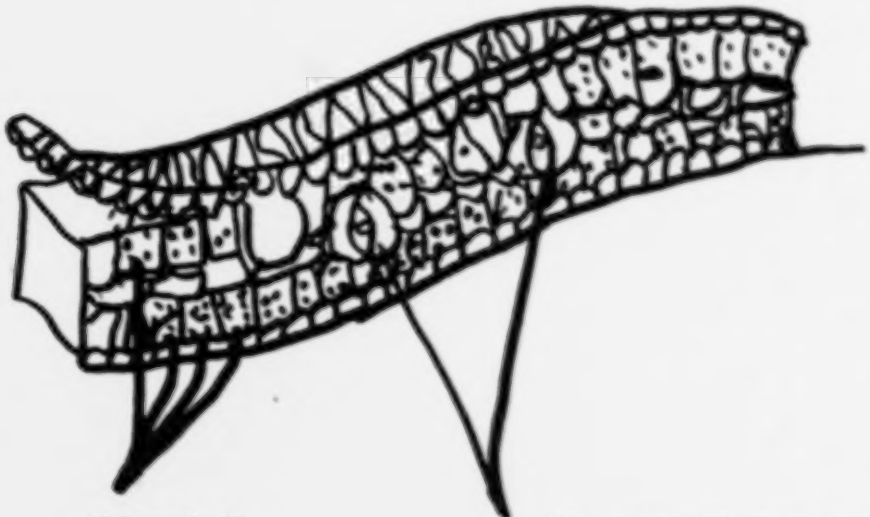
HOW A LEAF MAKES FOOD



Photosynthesis is plant's food making.

Plants use <u>water</u>, <u>light</u>, <u>carbon dioxide</u> and their <u>chlorophyll</u> to make their own food.

If we cut a slice across a leaf and looked at it under a microscope, it would look like this:



Chlorophyll

<u>Stomates</u> open and close to control the oxygen and carbon dioxide.

ATHLETE'S FOOT FROM HIKING CLUB

KINDS OF PLANTS

There is one group of plants that has no chlorophyll and is not green. The other group of plants is green. We'll learn about and collect samples from each group.

I. Non-green plants

KINDS	CHARACTERISTICS	EXPERIMENT
1.	1.	
2.	2.	
3.	3.	
4.		

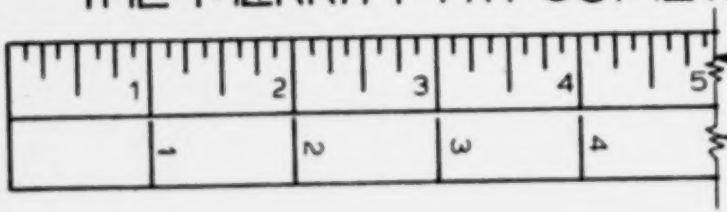
II. Green plants

KIND	CHARACTERISTICS	NOTES
1.		
2.		
3.		

TREE CHECK CHART

Shape Branches Alternate or Opposite	Leaves Simple or Compound	Bark Color, Texture	Buds, Size, Shape Number and Color	Any distinctive Characteristics	Name

THE MERRITT HYPSOMETER – FOR ESTIMATING HEIGHT



Top half of a yardstick

Cover the lower half of yardstick with masking tape and extend inch markers so they can be read when the stick is held vertically. Label.

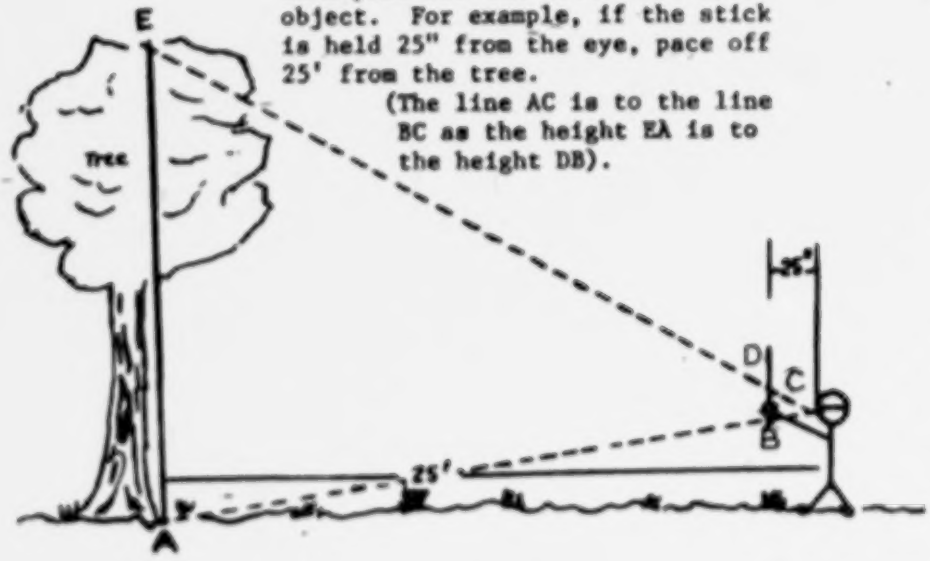
MATERIAL: A yardstick or similar piece of thin wood, masking tape.

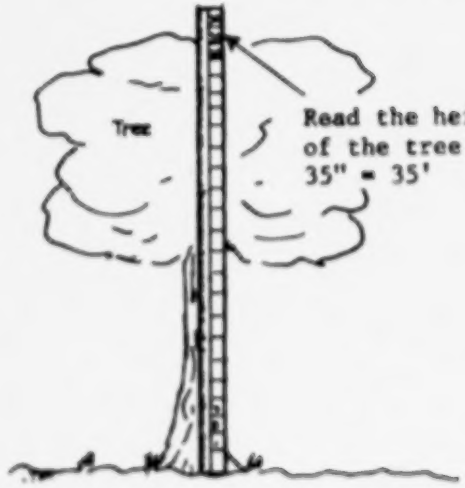
PRINCIPLE: The Hypsometer works on a ratio of 1 inch to 1 foot. To set up the ratio, two similar triangles must be formed. One triangle is with the eye and stick (DCB) and the other is with the eye and the object to be measured (ECA).

USE: 1. Hold the stick at arms length and measure the distance from the eye to the stick in inches. For every inch pace off one foot from the object. For example, if the stick is held 25" from the eye, pace off 25' from the tree.

(The line AC is to the line BC as the height EA is to the height DB).

2. Holding your head steady, read the height in feet.





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ANIMAL ADAPTION

What do you suppose that is? _____

All animals have structures that increase their chances of surviving! -

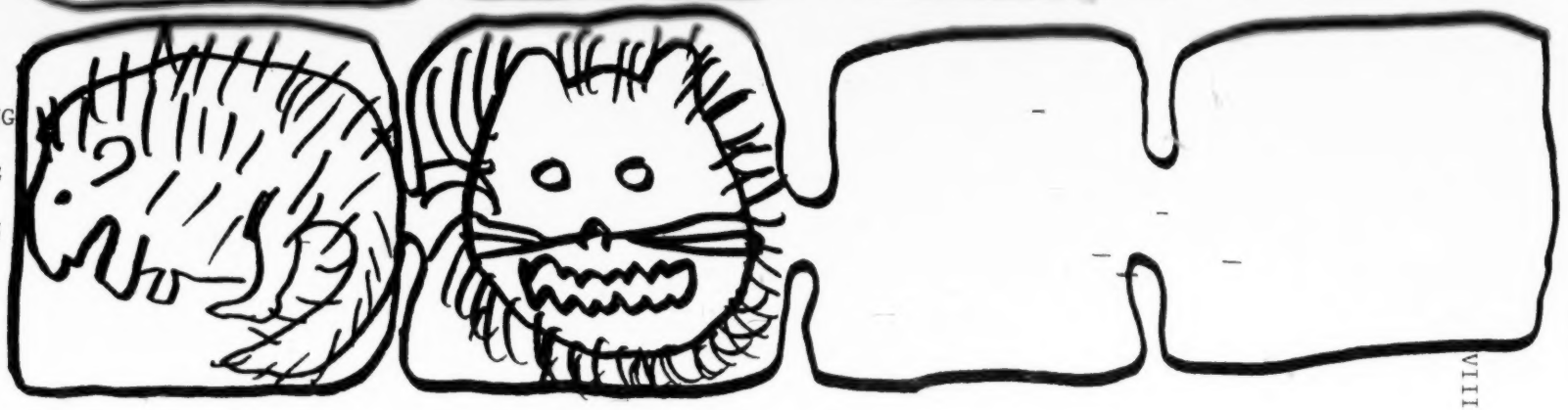
Can you think now of some animals that have special parts to help them? _____

What? _____

Animals have different ways of eating, protecting themselves, etc. Add 2 examples to each set of pictures you see below.

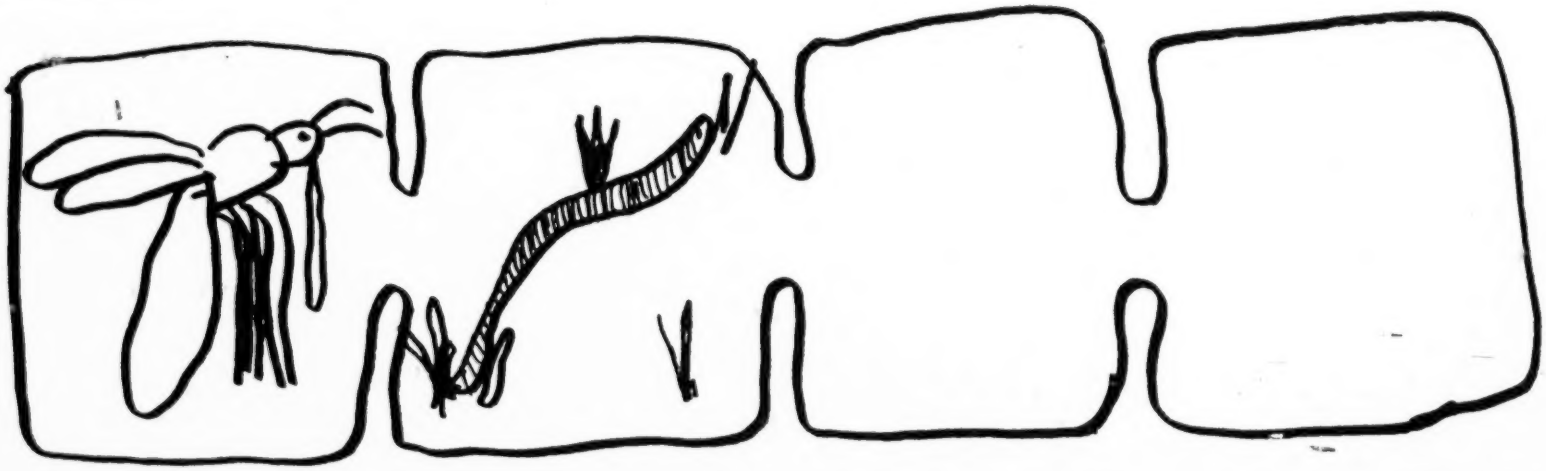
EATING

AVOIDING BEING EATEN

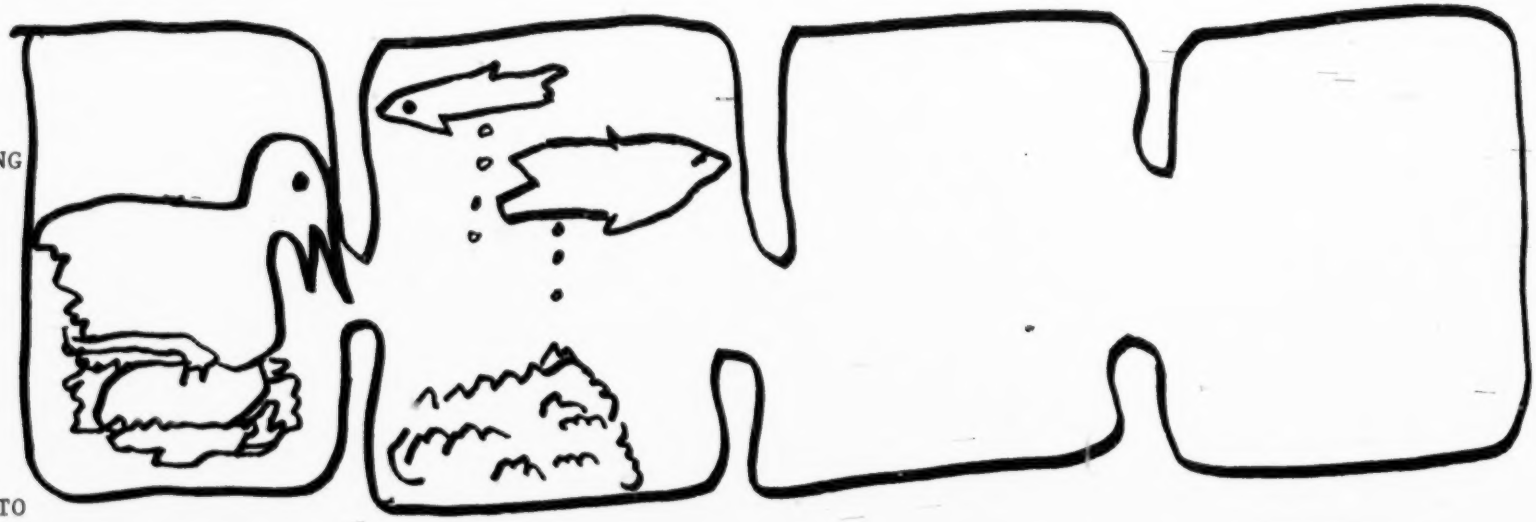


VIII

MOVING



REPRODUCING

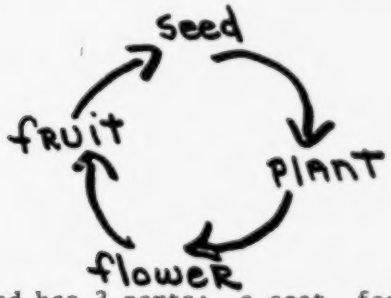


ADAPTING TO

WEATHER

A NEVER ENDING STORY - PLANTS

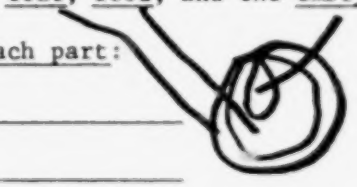
I. A seed is planted. A plant grows from it and blooms. The flower produces fruit, and fruit produces seed. The new seed can grow into a plant again. The cycle of seed, plant, flower, fruit, goes on over and over. Draw a sketch of the cycle here. Put in the proper parts.



II. A seed has 3 parts: a coat, food, and the embryo.

Write the purpose of each part:

1. Seedcoat - _____
2. Food - _____
3. Embryo - _____



4. Find each part of the seed in a real seed that's in the room.

III. 1. Seeds are found in the _____ of a plant.

2. A very large seed we know is the _____.

3. A fruit that has one seed is the _____.

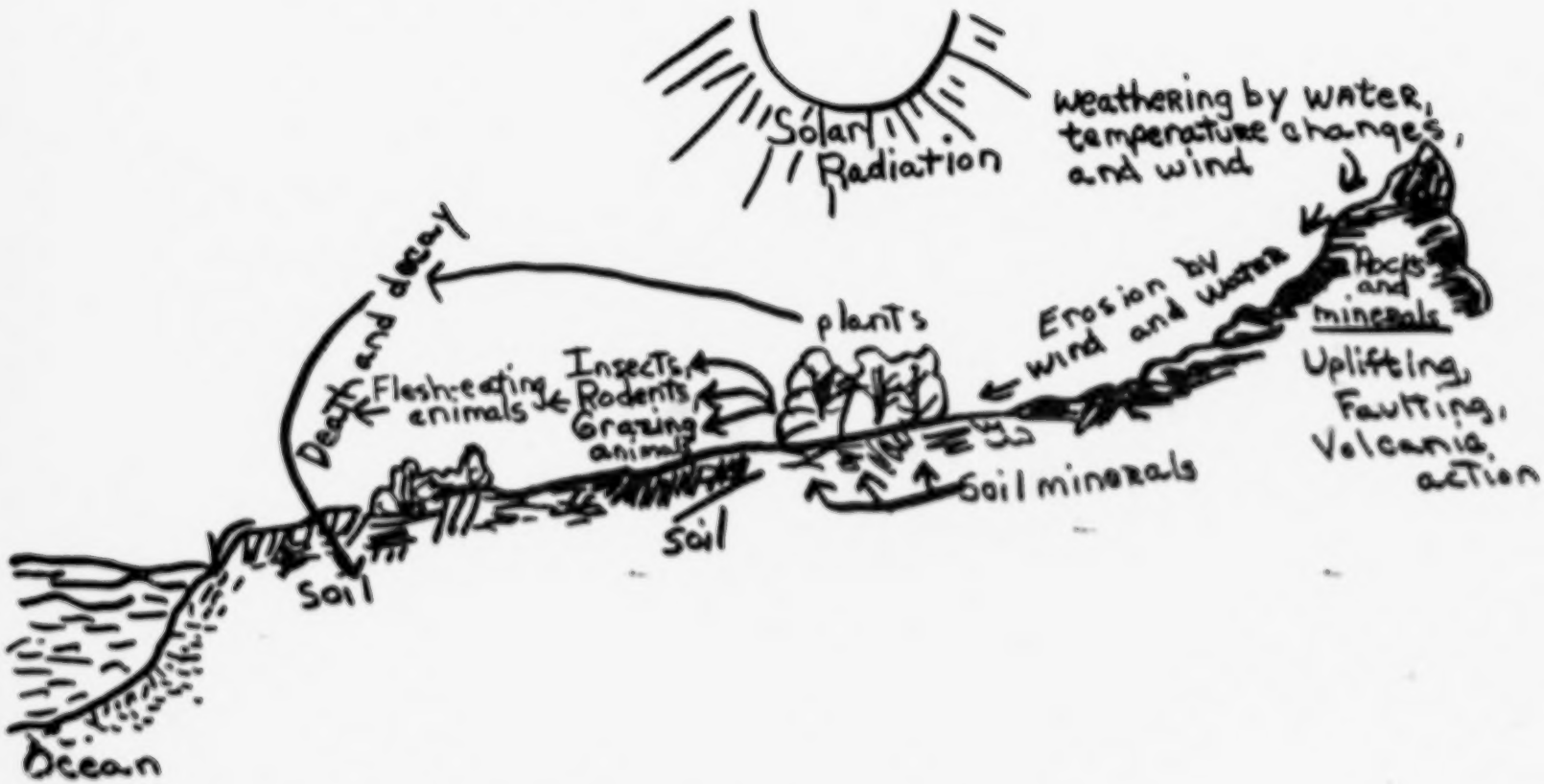
4. A fruit that has more than one seed is the _____.

5. Name some edible seeds. _____ _____

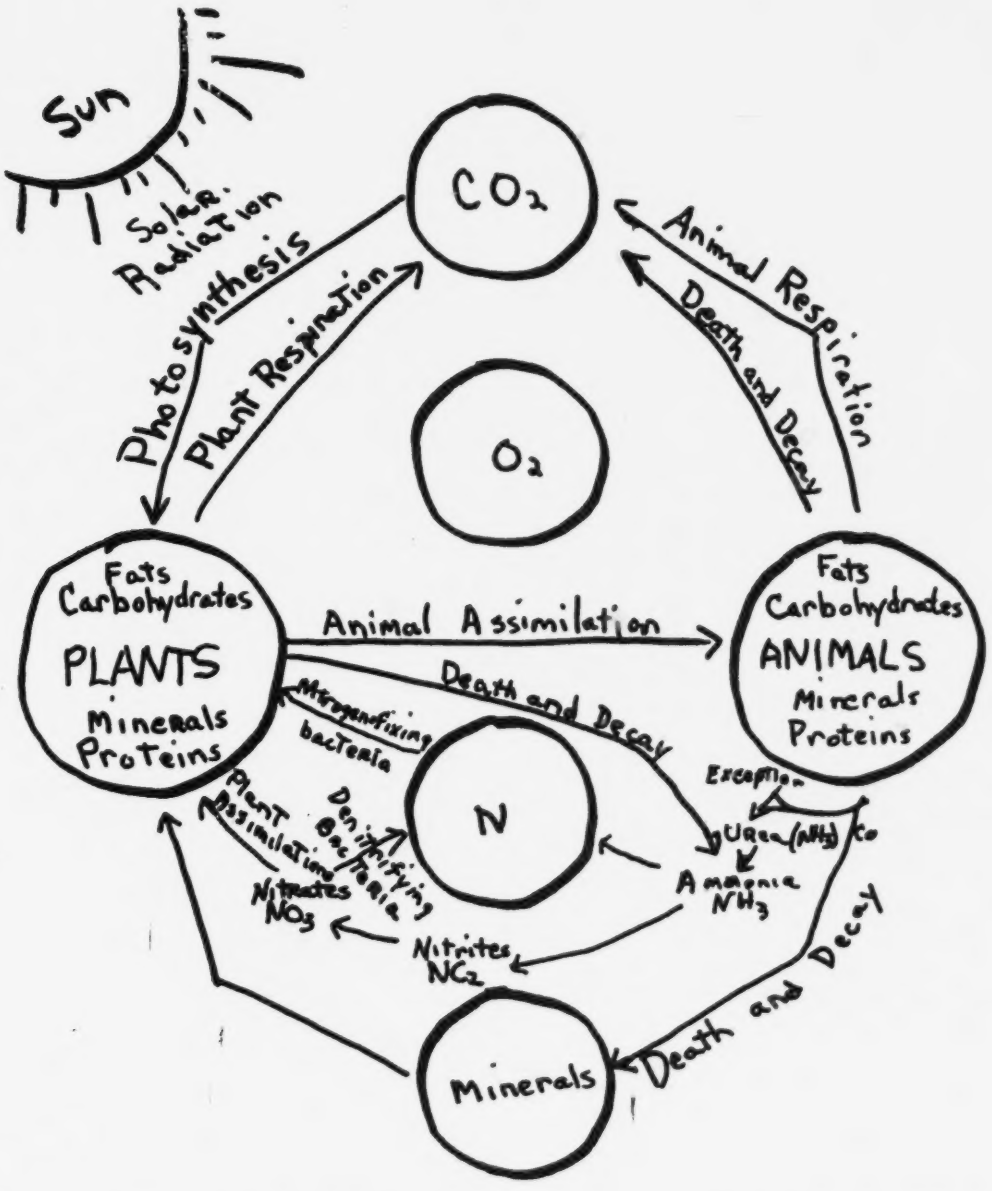
6. Not all seeds germinate. In order to do so they must have a suitable place with _____.

7. Seeds travel by _____, _____, and _____.

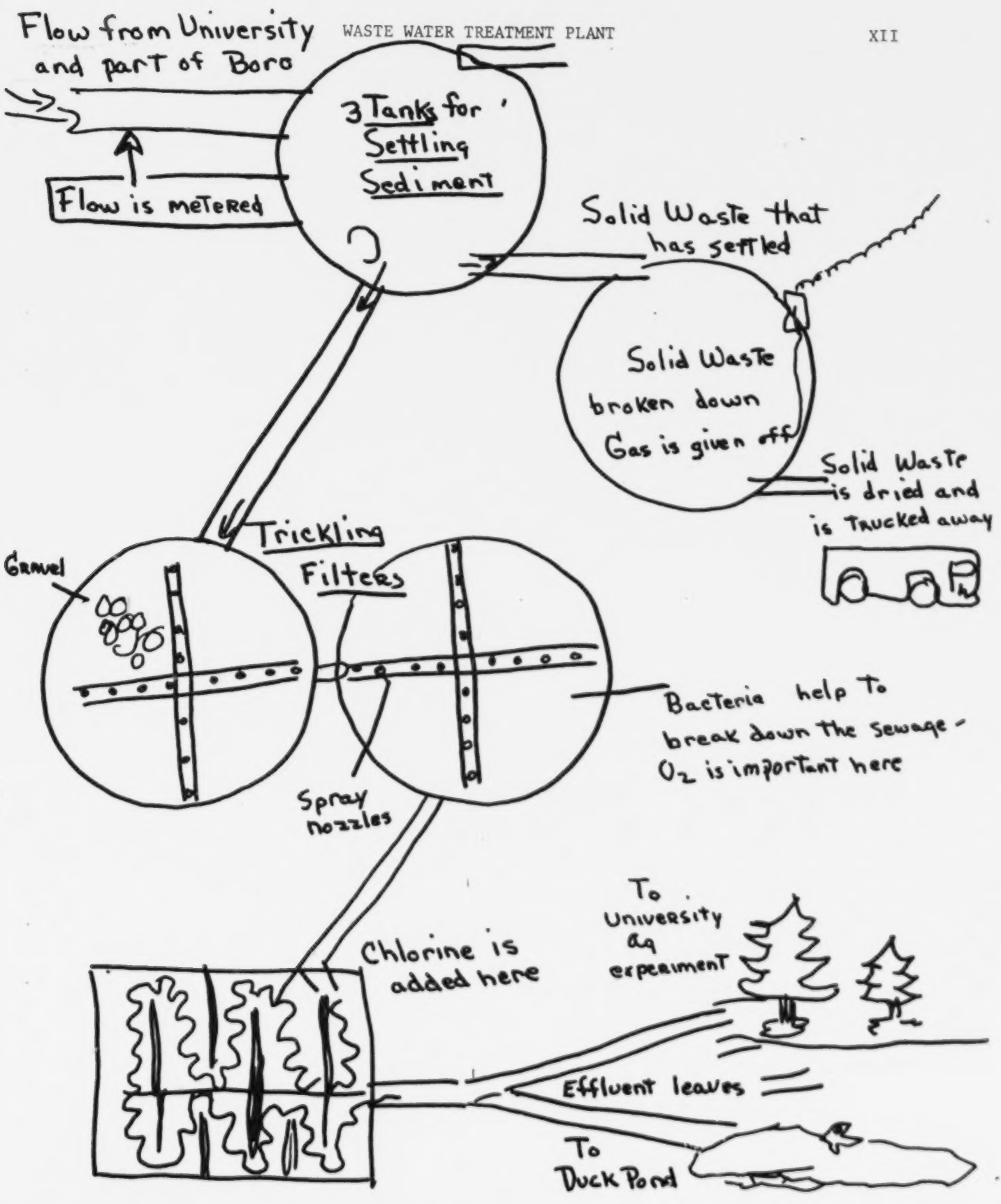
8. Name four types of ways that seeds can be dispersed. Name a kind of plant that has a seed in each category. (USE THE BACK.)



The mineral cycle. Rocks become disintegrated into soil. The soil becomes eroded and is transported by water toward the lowlands. The soluble minerals become dissolved into the soil water and are eventually carried into rivers and lakes to the sea. From T. I. Storer, and R. L. Usinger, 1957, General Zoology, McGraw-Hill.



The chemical cycles of carbon dioxide, oxygen, nitrogen, and minerals in nature. Arrows indicate the paths of movement of materials from the air (CO_2, O_2, N) and soil (minerals) to and from plants and animals. (After Storer, General Zoology)


Flow from University and part of Boro
WASTE WATER TREATMENT PLANT
3 Tanks for Settling Sediment
Flow is metered
Solid Waste that has settled
Solid Waste broken down
Gas is given off
Solid Waste is dried and is trucked away
Trickling Filters
Gravel
Bacteria help to break down the sewage - O_2 is important here
Spray nozzles
To University ag experiment
Chlorine is added here
Effluent leaves
To Duck Pond

RECYCLING DIGEST

GLASS: Sort by color into barrels behind Jawbone Coffee House, 415 E. Foster Ave.

ALUMINUM: Shipped by State College Free Press. Phone for pick-up 237-5605 or 237-8067

HOUSEWARES: Thrift Shop, 902 S. Allen, Thursdays - 9 a.m. to 4 p.m.

NEWSPAPERS: Salvation Army Pick-up, Call 237-2526

MAGAZINES, NEWSPAPERS: Penn State Outing Club's Eco-Action Committee receives paper at McElwain and Simmons Halls. Call 238-2130 for help at loading dock.

TO USE "ACTION LION":

WRITE REQUEST FOR HELP TO -

Action Lion
Pennsylvania Mirror
P.O. Box P-10
State College, Pa. 16801

Include name, address, and phone number.

A DAY AT ALAN SEEGER NATURAL AREA

TIME	ACTIVITY		
9:00 A.M.	DEPARTURE FROM SCHOOL		
9:40 A.M.	ARRIVAL: As the buses approach Alan Seeger, Please get ready for a quiet time. Each person should get off the bus silently and go slowly to any area within sight of the bus. Stand still and be quiet for 5 minutes. LOOK. LISTEN. BREATHE DEEPLY. ENJOY! APPRECIATE! Then take lunches to the lunch pavillion and go to the meeting area for your first activity.		
9:45	FOREST TRAIL Red Group	CRAFTS Blue Group	EXPLORATION Yellow Group
10:30	Yellow Group	Red Group	Blue Group
11:15	Blue Group	Yellow Group	Red Group
12:00	LUNCH, FOLLOWED BY FREE TIME IN WHICH TO DO THE FOLLOWING: 1. Take a walk with an adult leader. 2. Finish up a craft project. 3. Explore or play near the lunch pavillion. 4. Rest, relax, talk with your friends.		
1:00 P.M.	CAMPFIRE		
2:00	DEPARTURE		
2:40	ARRIVAL AT SCHOOL IN TIME FOR DISMISSAL		

Everyone is urged to help keep Alan Seeger a beautiful natural area by refraining from disturbing plants, animals, and wood which is decaying. We hope to leave Alan Seeger even more beautiful than we find it.

Blue jeans and sneakers would be appropriate dress. You may wish to use an insect repellent on your child before he leaves home, but please do not send pressure cans along. Each person will bring his own lunch. Water is available at the site.

In addition to the teachers, seventeen parents, the school nurse, and a forest ranger will accompany the group.

Intermediate Division XV
Boalsburg School
April 26, 1972

Dear Parents,

Our Environmental Education Unit is off to a fine start. We have begun our study of the relationships among living things and the non-living part of the environment by examining soil, water, air, and sunlight as important to the growth of plants. We are beginning to construct food webs, tracing the dependence of all animal life back to green plants. During this week we have been able to have some field experience in observing plant and animal life in a variety of settings.

On four separate days next week, field trips will be taken to Mount Nittany. Approximately thirty children, one teacher, and five other adults will go each day. We plan to leave the school soon after 9 A.M. and return not later than 2:30 P.M. Please rely upon the weather forecast to help your child dress for the occasion. In case of very high probability of rain, the trip will be rescheduled; just a possibility means go with raincoat or jacket. In any case, comfortable shoes, long pants, and a jacket or sweatshirt will be important.

Each child should carry a sack lunch including beverage. Please avoid using glass containers and consider weight and bulk. Children tend to tire from carrying extra items such as cameras, thermos bottles, and such.

If you are interested in accompanying a group, we would welcome your participation.

Sincerely yours,

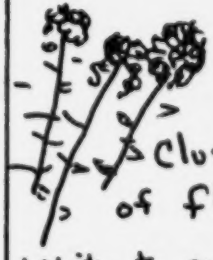
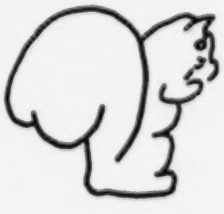
Teachers of the Intermediate Division

_____has my permission to accompany his class on a hike up Mount Nittany on _____, May _____.

My child will bring a sack lunch and beverage for this day.

Date _____ Signed _____

ARE YOU SHARP-EYED? SEE HOW MANY OF THESE THINGS YOU CAN SPOT FROM THE BUS WINDOWS. CIRCLE THE ONES YOU SEE.

Chipmunk	Mayapples	Groung hog	Turkey
Oriole- -Orange and black	a bear!	Deer	County Line
Phlox-  Clusters of flowers White to purple	Crow- Coal black	Pink flowers on low bushes. Mountain Laurel	Ruffed Grouse
 Squirrel	Lichens on rocks	Ringneck Pheasant	a rabbit

LEADER'S GUIDE FOR EXPLORATION GROUPS

Children will meet at the Exploration Pavillion to be assigned to leaders. Each group of no more than five children with its leader will choose a small area to be studied during the first half hour of this activity period. Any area except the trail being used by the forest ranger would be appropriate. Try to choose a relatively small area and observe it closely. Suitable sites might include the following:

1. A defined section of a stream.
2. A marshy area or puddle.
3. A decomposing log or stump.
4. A defined area of woods.

etc.

Encourage children to observe and describe what they see- including living and non-living things, tracks or other signs. Names of particular plants or insects can be found from the descriptions at the pavillion library, or back at school, so do not be concerned with identification at the moment.

Please discourage the taking of specimens, especially living plants or animals. Aside from the principals of conservation, there are legal prohibitions on state property. Water or sediment samples may be carried to the pavillion for microscopic examination.

If time permits, some exploration of a second site may be used for comparison. All groups should return to the pavillion in half an hour to allow about fifteen minutes in which to informally discuss "finds" and build a general picture of the habitats within this area.

Please accept responsibility for keeping your small group with you during the exploration period. Persistent discipline problems should be reported to a teacher and another activity requiring less self-discipline will be provided for that child.

Your help makes this activity possible. Thank you so much!

Sincerely yours,

Irene Mong

EXPLORATION AREA _____ GROUP _____, _____,

_____, _____,

_____, _____

LOCATION	DESCRIPTION	COMMENTS, OBSERVATIONS

*A-V RESOURCES FOR ENVIRONMENTAL UNIT

FILMSTRIPS

INTERDEPENDENCE:

N-39	Backyard Insects
N-40	The Caterpillar's Journey
T-7	Life in a Pond
T-8	Amphibians
T-9	Interdependence of Plants and Animals
T-30	Observing Birds in Nature
T-31	Discovering Reptiles
T-33	Discovering Fishes
T-34	Discovering Amphibians
T-35	Discovering Birds
T-36	Discovering Mammals
H-49	How a Plant Grows
H-50	Trees Around Us
I-9	Plants Help Us
I-12	How a Plant Makes Food
I-25	Plants and Water
I-26	Life Cycle of a Plant
I-28	Plants and Animals
I-34	Kinds of Plants
I-36	Photosynthesis
U-38	Flowers, Fruits and Seeds
U-39	Roots and their Work
U-40	Stems and their Work
U-41	Growth from Seeds
U-42	Leaves and their Work
D-66	Northern Conifer Forest
D-67	Eastern Deciduous Forest
H-19	Spiders
H-21	Freshwater Community
H-23	Backyard Community
H-26	The Ant, A Social Insect
H-27	The Busy Honeybee
H-28	Caterpillar to Butterfly
H-29	Insect Pests
A-51	Trees & Tape
A-52	Lumber & Tape
A-53	Plants & Tape
A-56	Desert, Soil, Sand, Stone & Tape

* All these filmstrips are available for use through the Media Office at the College Heights School.

SURVIVAL:

H-42	Nature's Disguises
H-43	Life Cycle of an Animal
H-44	Adaptations in Animals
U-28	How Living Things are Adapted
U-29	How Plants and Animals Have Changed
U-31	How Adaptation Helps Living Things Survive
I-7	Man Improves Plants and Animals
I-11	Plants Change Through the Years
I-24	Changing Plant Communities
I-35	Adaptation in Plants
F-95	Man: An Endangered Species? & Tape
F-96	Breaking the Biological Strand & Tape
F-97	Vanishing Species & Tape
F-98	Preserve and Protect & Tape
B-11	Forests - a Renewable Resource

RECYCLING:

C-78	The Waste of our Resources & Tape
C-79	The Need for Conservation & Tape
C-80	Conservation of Water & Tape
C-82	Conservation of Forests & Tape
C-83	Conservation of Wildlife & Tape
C-84	Conservation of Minerals & Tape
C-85	Conservation of Human Resources & Tape